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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Federal Communications Commission
Office of Secretary

In the Matter of)

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Rulemaking to Amend Parts 1, 2, 21 and 25)
of the Commission's Rules to Redesignate)
the 27.5-29.5 GHz Frequency Band, to)
Reallocate the 29.5-30.0 GHz Frequency)
Band, to Establish Rules and Policies for)
Local Multipoint Distribution Service and)
for Fixed Satellite Services)

CC Docket No. 92-297

REPLY COMMENTS OF THE HEWLETT-PACKARD COMPANY
FOURTH NOTICE OF PROPOSED RULEMAKING

I. INTRODUCTION

As a potential manufacturer of LMDS equipment, Hewlett-Packard Company ("HP") is pleased to note significant interest by a wide variety of commenters in this technology, and the general support among all commenters for rapid resolution of the above-mentioned proceeding. After review of all comments, HP would like to address two specific issues described below.

II. HP SUPPORTS MAKING LMDS A PRIMARY PROTECTED SERVICE IN THE 31.075 - 31.225 GHz BAND AND LEAVING THE 31.000 - 31.075 GHz AND 31.225 - 31.300 GHz BANDS UNCHANGED AND, THEREFORE, AVAILABLE TO ACCOMMODATE EXISTING APPLICATIONS IN THE 31 GHz BAND.

Most commenters generally support the allocation of 31 GHz for LMDS, however some commenters, particularly the incumbents of the 31 GHz band, express concern about how the band would be shared with existing licensees. HP believes that the most effective way to

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accommodate existing applications in the 31 GHz band is to split the 31.0 to 31.3 GHz band and assign the center 150 MHz from 31.075 GHz to 31.225 GHz to LMDS as a primary protected service. This spectrum can be used for subscriber-to-hub transmissions, hub-to-subscriber transmissions or hub-to-hub transmissions. The remaining portion of the 31 GHz band, from 31.000 to 31.075 GHz and 31.225 to 31.300 GHz would provide 150 MHz in two 75 MHz, non-contiguous bands, for existing 31 GHz applications. Sierra Digital Communications, Inc., a major supplier of these systems, has indicated this would be sufficient spectrum to accommodate their applications. Sierra Digital Communications, Inc. has also indicated that existing installations can be made to comply to this band assignment by simply re-tuning installed radios, a far less expensive operation than moving this application to another frequency band.

The LMDS spectrum would then be comprised of 850 MHz from 27.70 to 28.35 GHz that could be used for hub-to-subscriber, subscriber-to-hub and/or hub-to-hub transmissions. The 850 MHz band would be sufficient to accommodate full duplex operation by itself or could be paired with the above-mentioned 31.075 to 31.225 GHz band for duplex operation. LMDS also has available the 29.10 to 29.25 GHz band on a co-primary basis which can be used for hub-to-subscriber or hub-to-hub transmissions. This spectrum can also be paired with the 31.075 to 31.225 GHz band to enable duplex operation.

In summary, LMDS would have primary unrestricted use of 1000 MHz of spectrum and co-primary restricted use of 150 MHz for a total of 1150 MHz. There also remains the possibility of gaining greater use of the 29.00 to 29.25 GHz band at some time in the future provided that tests prove that subscriber-to-hub transmissions in this band will not interfere with satellite uplink

receivers. It also provides sufficient spectrum to accommodate incumbent users and future applications planned for the 31 GHz band.

HP strongly urges the Commission to adopt this band sharing plan.

III. IT IS ESSENTIAL THAT A MINIMUM OF 150 MHz AT 31 GHz AND THE 1000 MHz IN THE 28 GHz BAND AS DESIGNATED IN THE REPORT AND ORDER BE AUCTIONED AS A SINGLE BLOCK.

Two commenters, Puerto Rico Telephone Company and Wireless Cable Association, suggested that separate licenses be awarded, one for the 28 GHz band and one for the 31 GHz band. This issue has been discussed at length in comments to the 3rd NPRM. Although there are some benefits as pointed out by the commenters, HP believes the negative outweighs the positive. First of all, it commits an entire BTA to the two licenses and will not enable one operator to fully realize the potential of LMDS throughout the BTA. A better solution is to allow licensees to disaggregate licenses either geographically or spectrally. This also puts the burden of coordination on the original licensee and it allows for geographic separation within a BTA whereas two licenses would set the tone for the entire BTA.

Texas Instruments and RioVision suggested in comments to the Commission that auctions proceed with the 28 GHz band if the 31 GHz band is contested. Having the auctions proceed without the 31 GHz band would force all LMDS equipment manufacturers into a design concept which enables two-way services within the 850 MHz band. This is not spectrally efficient and will be a more expensive solution than having two non-contiguous bands.

It would also create uncertainty as to what additional spectrum would be made available, thus putting the LMDS manufacturers in a position of having to speculate on what the eventual

assignment would be or alternatively hold back on a final design implementation until such time that a final determination was made. The result would be a significant delay in the time before LMDS could meet its full potential as an interactive communication service, as well as cause a serious devaluation in the potential value of the licenses.

HP strongly believes that the band plan presented above will eliminate the issues raised about the 31 GHz assignment to LMDS and enable the FCC to move forward expeditiously with a Final Report and Order.

IV. CONCLUSION

HP supports a band sharing plan for 31 GHz that provides 150 MHz of spectrum for LMDS as a primary protected service and provides 150 MHz of spectrum for existing services at 31 GHz and HP considers it essential that the entire 1.150 GHz of spectrum allocated for LMDS be assigned and auctioned as single block.

HP also believes that licensees should be allowed to disaggregate licenses spectrally or geographically.

HP urges the Commission to consider and act affirmatively on the above-mentioned issues in order to resolve this proceeding expeditiously.

Respectfully submitted,

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